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Sulphacetamide: Detmng. sulphonamides. Barakat and Shaker, 216.

Sulphaguanidine: Detmng. sulphonamides. Barakat and Shaker, 216.

Sulphanilamide: Detmng. sulphonamides. Barakat and Shaker, 216.

Sulphonamides: Detmng. —. Barakat and Shaker, 216.

Sulphur: Detmng. — in plant material. Lachica Garrido, 61.

Sulphur dioxide: Detmng. free — content of ciders. Burroughs and Sparks, 55.

Detmng. — in beers and wines. Jones, 678.

Sunset yellow FCF: Thin-layer chromatographic identification of annatto and other food colours. Ramamurthy and Bhalerao, 740.

Surface-active agents: Examining detergents by paper chromatography. II. Drewry, 75.

Syrups: Detmng. ascorbic acid in blackcurrant and other coloured fruit-juice —. Lee and Leong, 674.

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2,4,5-T: See **2,4,5-Trichlorophenoxyacetic acid.**

Tantalum: Analytical Chemistry of Niobium and —. Moshier. (Review), 624.

Anion-exchange separation of titanium, zirconium, niobium, —, molybdenum and tungsten, with particular reference to analysis of alloys. Dixon and Headridge, 185; Erratum, 688.

Tartrazine: Detmng. hypobromite and bromite with — as indicator. Hashmi and Ayaz, 147.

Thin-layer chromatographic identification of annatto and other food colours. Ramamurthy and Bhalerao, 740.

Taurine: Separating and detmng. oxidation products of cysteamine. Jayson, Owen and Wilbraham, 788.

TDE: See **1,1-Dichloro-2,2-bis-(p-chlorophenyl)-ethane.**

Tea: Titan yellow method for detmng. magnesium in plant material (— leaves) in presence of excess of manganese. Chenery, 365.

Technetium-99: Detmng. uranium-235 by neutron activation and ring-oven separation of molybdenum-99 —. Hilton and Reed, 599.

Teepol 710/5: Dispersing agents for tin - dithiol complex. Board and Elbourne, 555.

Telodrin: Clean-up of animal fats and dairy proucts for analysing chlorinated pesticide residues. Maunder, Egan, Godly, Hammond, Roburn and Thomson, 168.

Terbium: Emission-spectrographic detmn. of impurities in uranium-233 dioxide after pre-concentration of rare-earth elements by ion exchange. Birks, Weldrick and Thomas, 36.

Tetraethyl SS'-methylene bis(phosphorothiolothionate): Analysing organo-phosphorus pesticide residues by gas chromatography. Egan, Hammond and Thomson, 175.

Detcng. organo-phosphorus pesticides on thin-layer chromatograms. Bunyan, 615.

Detmng. chlorinated pesticides by electron-capture gas chromatography. Maunder, Egan and Roburn, 157.

Thallium: Emission-spectrographic detmn. of impurities in uranium-233 dioxide after pre-concentration of rare-earth elements by ion exchange. Birks, Weldrick and Thomas, 36.

2-Thenoyltrifluoroacetone: Extraction and spectrophotometric detmn. of platinum^{IV} and palladium^{II} with —. De and Rahaman, 795.

Thermodynamics: Chemical —: Basic Theory and Methods. Klotz, with Young. Revised Edn. (Review), 807.

Introduction to Chemical —. Klotz, with Young. (Review), 807.

Thiolsulphonate: Separating and detmng. oxidation products of cysteamine. Jayson, Owen and Wilbraham, 788.

Thiometon: See **S-[2-(Ethylthio)ethyl] dimethyl phosphorothiolothionate.**

Thione: See **2-Mercaptopyridine-N-oxide.**

Thulium: Emission-spectrographic detmn. of impurities in uranium-233 dioxide after pre-concentration of rare-earth elements by ion exchange. Birks, Weldrick and Thomas, 36.

Thyroxine: Application of paper and thin-layer chromatography to identifying — in a feeding stuffs additive. Patterson and Clements, 328.

Timber dips: Field detmn. of benzene hexachloride in —. Yuen, 726.

Tin - dithiol complex: Dispersing agents for —. Board and Elbourne, 555.

Emission-spectrographic detmn. of impurities in uranium-233 dioxide after pre-concentration of rare-earth elements by ion exchange. Birks, Weldrick and Thomas, 36.

Paper chromatography of organo — compounds. II. Reversed-phase systems. Williams and Price, 220.

Separation of trace metals by manganese dioxide collection method. I. Behaviour of antimony, bismuth and —: separation of traces of antimony and — from bismuth. Ogden and Reynolds, 538; II. Behaviour of lead: detmng. antimony and — in presence of lead. Reynolds and Tyler, 579.

- Titan yellow** method for detmng. magnesium in plant material in presence of excess of manganese. Chenery, 365.
- Titanium:** Anion-exchange separation of —, zirconium, niobium, tantalum, molybdenum and tungsten, with particular reference to analysis of alloys. Dixon and Headridge, 185; Erratum, 688.
- Emission-spectrographic detmn. of impurities in uranium-233 dioxide after pre-concentration of rare-earth elements by ion exchange. Birks, Weldrick and Thomas, 36.
- Titrations:** See **Analysis**.
- Titration:** Karl Fischer titration unit for routine use. Hawkins, 432.
- Tobacco:** Detmng. propylene glycol in — by cellulose-column chromatography. Clements and Patterson, 67.
- Effect of glycerol added to — on constituents of cigarette smoke. Souza and Scherbak, 735.
- Toxicity:** Second Report of the — Sub-Committee of the Main Technical Committee of the British Plastics Federation, with Methods of Analysis of Representative Extractants. (Review), 501.
- Toxicology:** Progress in Chemical —. Vol. 1. Stolman. (Review), 563.
- Triazine herbicides:** Detmng. — by gas-liquid chromatography with particular reference to atraton in soil. Benfield and Chilwell, 475.
- 1,1,1-Trichloro-*n*-butanol:** Detcng. trichloro sedatives in urine. Moss and Kenyon, 802.
- 1,1,1-Trichloro-2,2-di-(4-chlorophenyl)ethane:** Clean-up of animal fats and dairy products for analysing chlorinated pesticide residues. Maunder, Egan, Godly, Hammond, Roburn and Thomson, 168.
- Detmng. chlorinated pesticides by electron-capture gas chromatography. Maunder, Egan and Roburn, 157.
- Trichloroethanol:** Detcng. trichloro sedatives in urine. Moss and Kenyon, 802.
- 2,4,5-Trichlorophenoxyacetic acid:** Chromatographic detcn. and detmn. of organo-chlorine herbicides in soil and water. Abbott, Egan, Hammond and Thomson, 480.
- Trietazine:** See **2-Chloro-4-diethylamino-6-ethylamino-1,3,5-triazine**.
- Tripe:** Identifying offals in sausages. Hole, Roberts and Jones, 332.
- Tris(2-thiopyridine-*N*-oxide) - iron^{III} complex:** Gravimetric detmn. of iron by the homogeneous precipitation of —. Dalziel and Thompson, 707; Erratum, 814.
- Trithion:** See **S-(*p*-Chlorophenylthiomethyl) *OO*-diethyl phosphorothiolothionate**.
- Tungsten:** Anion-exchange separation of titanium, zirconium, niobium, tantalum, molybdenum and —, with particular reference to analysis of alloys. Dixon and Headridge, 185; Erratum, 688.
- Diffusion-controlled oxidation of carbon in nickel and other metals (—) as basis of analysis. Rickard, 235.
- Emission-spectrographic detmn. of impurities in uranium-233 dioxide after pre-concentration of rare-earth elements by ion exchange. Birks, Weldrick and Thomas, 36.
- Geochemical field detmn. of — in soils and stream sediments. Bowden, 771.

U

- Udder:** Identifying offals in sausages. Hole, Roberts and Jones, 332.

- Uranium:** Detmng. caesium-137 in irradiated — by ring-oven technique and gamma-ray spectrometry. Hilton and Reed, 132.
- Uranium-235:** Detmng. — by neutron-activation and ring-oven separation of molybdenum-99 - technetium-99. Hilton and Reed, 599.
- Uranium-233 dioxide:** Emission-spectrographic detmn. of impurities in — after pre-concentration of the rare-earth elements by ion exchange. Birks, Weldrick and Thomas, 36.
- Uric acid:** Occurrence of honeydew in honey (detmng. —). Cowan and Mitchell, 222.
- Urine:** Apparatus for detmng. small amounts of alcohol in sour milk and —. Andrews and Cooper, 272.
- Arylhydroxylamines. IV. Colorimetric detmn. (in —). Boyland and Nery, 95.
- Colorimetric detmn. of *N*-hydroxyurethane and related compounds (in —). Boyland and Nery, 520; Erratum, 626.
- Detcng. trichloro sedatives in —. Moss and Kenyon, 802.
- Use of a cation-exchange resin in detmng. urinary ascorbic acid. Hughes, 618.

V

- Vamidithion:** See ***OO*-Dimethyl S-2-(1-methyl-carbamoylthio)ethyl phosphorothiolate**.
- Vamidithion sulphone:** Detcng. organo-phosphorus pesticides on thin-layer chromatograms. Bunyan, 615.
- Vanadium:** Emission-spectrographic detmn. of impurities in uranium-233 dioxide after pre-concentration of rare-earth elements by ion exchange. Birks, Weldrick and Thomas, 36.
- Vegetables:** See **Plants**.
- Vinasses:** Detmng. betaine in — of beet molasses. Görög and Ezer, 282.
- Visceral extracts:** Loss of strychnine in purification of — with concentrated sulphuric acid. Lilliman and Trezise, 750.
- Vitamin A:** Detmng. fat-soluble vitamins in diet supplements and compound feeding stuffs. Society for Analytical Chemistry, Analytical Methods Committee, Additives in Animal Feeding Stuff Sub-Committee, Vitamins (Fat-soluble) Panel, 7.
- Spectrophotometric detmn. of vitamin D in presence of —. Barua and Rao, 534.
- Vitamin B₁:** Interference by *p*-aminosalicylic acid or its sodium salt in detmng. — by the thiochrome method. Sen and Sengupta, 558.
- Vitamin B₁₂:** See **Cyanocobalamin**.
- Vitamin D:** Detmng. fat-soluble vitamins in diet supplements and compound feeding stuffs. Society for Analytical Chemistry, Analytical Methods Committee, Additives in Animal Feeding Stuff Sub-Committee, Vitamins (Fat-soluble) Panel, 7.
- Detmng. — in pharmaceutical preparations by thin-layer chromatography. Heaysman and Sawyer, 529.
- Spectrophotometric detmn. of — in presence of vitamin A. Barua and Rao, 534.
- Vitamins:** Detmng. fat-soluble — in diet supplements and compound feeding stuffs. Society for Analytical Chemistry, Analytical Methods Committee, Additives in Animal Feeding Stuff Sub-Committee, Vitamins (Fat-soluble) Panel, 7.

Vitamins—continued

- Detmng. water-soluble — in compound feeding stuffs. Society for Analytical Chemistry, Analytical Methods Committee, Animal Feeding Stuffs Sub-Committee, Vitamins (Water-soluble) Panel, I; Erratum, 232.
- Vitamin-Bestimmungen: Erprobte Methoden. Strohecker and Henning. (Review), 375.

W

- Water:** Absorptiometric detmn. of ammonia in boiler feed —. Tetlow and Wilson, 453.
- Absorptiometric detmn. of iron in boiler feed —.
- I. Detmng. reactive iron. Wilson, 389; II. Dissolving non-reactive iron, 402; III. Detmng. total iron content, 442.
- Absorptiometric detmn. of silicon in —. IV. Detmng. reactive silicon in power-station — containing phosphate. Webber and Wilson, 632.
- Chromatographic detcn. and detmn. of organo-chlorine herbicides in soil and —. Abbott, Egan, Hammond and Thomson, 480.
- Colorimetric detmn. of *N*-hydroxyurethane and related compounds (in —). Boyland and Nery, 520; Erratum, 626.
- Eliminating — in gas-chromatographic detmn. of chloroform in aqueous solutions. Evans, 295.
- Errors in sampling for dissolved oxygen (in —). Montgomery and Cockburn, 679.
- Karl Fischer titration unit for routine use. Hawkins, 432.
- sea: *See* **Sea water**.
- Sensitive method for detmng. nitrate in — with 2,6-xlenol. Andrews, 730.
- Weighing:** Vacuum Microbalance Techniques. Vol. 3. Behrndt. (Review), 79.
- Weights:** Effect of random balance errors in the calibration of a set of —. Chalmers and Curnow, 567.
- Wetting agents:** *See* **Surface-active agents**.
- Wines:** Detmng. sulphur dioxide in beers and —. Jones, 678.
- Wood:** *See* **Timber**.
- Wool:** Detmng. cysteine and its *N*-acid derivatives in presence of each other. Wroński, 800.
- See also* **Fleece**.

X

- X-ray Analysis:** Advances in —. Vol. 6. Mueller and Fay. (Review), 231.
- Analysis: Data for —. Vols. I, II and III. Parrish and Mack. 2nd Edn. (Review), 685.
- fluorescence analysis: Casting fused beads for use in —. Carr-Brion, 556.
- 2,6-Xlenol:** Sensitive method for detmng. nitrate in water with —. Andrews, 730.

Y

- Yellow AB:** Thin-layer chromatographic identification of annatto and other food colours. Ramamurthy and Bhalerao, 740.
- Yellow OB:** Thin-layer chromatographic identification of annatto and other food colours. Ramamurthy and Bhalerao, 740.
- Ytterbium:** Emission-spectrographic detmn. of impurities in uranium-233 dioxide after pre-concentration of rare-earth elements by ion exchange. Birks, Weldrick and Thomas, 36.
- Yttrium:** Emission-spectrographic detmn. of impurities in uranium-233 dioxide after pre-concentration of rare-earth elements by ion exchange. Birks, Weldrick and Thomas, 36.

Z

- Zinaphos:** Analysing organo-phosphorus pesticide residues by gas chromatography. Egan, Hammond and Thomson, 175.
- Detmng. chlorinated pesticides by electron-capture gas chromatography. Maunder, Egan and Roburn, 157.
- Zinc:** Detmng. — in sewage and sewage sludge. Mills and Brown, 551.
- Emission-spectrographic detmn. of impurities in uranium-233 dioxide after pre-concentration of rare-earth elements by ion exchange. Birks, Weldrick and Thomas, 36.
- Photometric detmn. of excess of — in zinc oxide. Norman, 261.
- Polarographic detmn. of — in plant materials containing phosphate. Robertson, 368.
- X-ray fluorescence detmn. of — in samples of unknown composition. Carr-Brion, 346.
- Zinc chloride:** Spectrographic analysis of — and cadmium chloride solutions and solid zinc and cadmium sulphides by solution - powder method. Beck and Tubb, 205.
- Zinc oxide:** Photometric detmn. of excess of zinc in —. Norman, 261.
- Zinc sulphide:** Spectrographic analysis of zinc and cadmium chloride solutions and solid — and cadmium sulphide by solution - powder method. Beck and Tubb, 205.
- Zirconium:** Anion-exchange separation of titanium, —, niobium, tantalum, molybdenum and tungsten, with particular reference to analysis of alloys. Dixon and Headridge, 185; Erratum, 688.
- Zirconium mandelate:** Thermogravimetric study of mandelates of zirconium and hafnium. Adams and Holness, 603.
- Zirconium selenite:** Thermogravimetric study of selenites of hafnium and zirconium. Adams and Holness, 31.
- Zone Melting** of Organic Compounds. Herington. (Review), 232.

ERRATA:

Vol. 85, 1960:

- p. 176, 1st line under "PROCEDURE FOR LARGE QUANTITIES OF SILVER." For "stage 4" read "stage 9."

Vol. 88, 1963:

- p. 967, "Method." After the last reagent (Tris glycerol buffer), add the following paragraph—
 "Combined reagent—Dissolve 10 mg of glucose oxidase, 1 mg of horseradish peroxidase and 10 mg of *o*-dianisidine hydrochloride in 100 ml of tris glycerol buffer."
 p. 967, 1st line of "Procedure." Before "reagent" insert "Combined."
 p. 967, 4th line of "Procedure." After "2 mg" insert "per ml."

Vol. 89, 1964:

- p. 1, 15th line. For "to test both" read "both to test."
 p. 4, 9th line from foot of page. For "calcium DL-pantothenate" read "calcium D-pantothenate."
 p. 5, 3rd line from foot of page. For "pH 6 to 8" read "pH 6-8."
 p. 19, equation (4.4). Insert a rule between the numerator and denominator in right-hand brackets.
 p. 20, equation (7.2), denominator of the fraction in the centre brackets. For " \bar{N} " read " \bar{N}_w ."
 p. 21, 12th line reference at end of line. For "2" read "4."
 p. 25, 3rd line from foot of page. For "functions" read "fractions."
 p. 30, reference 2. For "670" (the page number of the reference) read "81."
 p. 30, reference 4. For "81" (the page number of the reference) read "682."
 p. 78, 11th line. For "L. S. Theobald" read "L. S. Theobald."
 p. 80. Review of BRITISH PHARMACOPOEIA 1963.

An inadvertent transposition led to the inclusion in this Review of a statement that biological assay was used for thyroïd. Thyroïd is in fact assayed by an oxygen-flask method. The fourth paragraph of the Review should be amended to read—

"It is interesting to note that in some instances (benzylpenicillin, benzathine penicillin and procaine penicillin) it has been possible to replace biological assay with chemical tests and assays."

- p. 121, reference 6. This should read "Merck Index, Sixth Edition, Merck & Co. Inc., Rahway, N.J., U.S.A., 1952, p. 895."
 p. 189, 2nd line below expression defining D . For " i " read " i_1 ."
 p. 189, 10th line from foot of page. For " i " read " i_1 ."
 p. 189, 11th line from foot of page. For " $v_1 = wD + i$ " read " $v_1 = wD + i_1$."
 p. 233, 1st line under "Procedure." For "(10 ml)" read "(100 ml)."
 p. 243, reference in 1st line of 1st footnote. For "7" read "8."
 p. 244, equation (2). For " $(E_2 - E_0)$ " read " $(E_2^0 - E_0^1)$."
 p. 245, heading to Table II. For " E_{Ag}^0 " read " E_{Ag}^0 ."
 p. 245, 11th equation in Table II, right-hand side. For " $H_2TeO_3 + 3H_2O$ " read " $H_2TeO_3 + H_2O$."
 p. 248, 3rd line from foot of page. For "and" read "but."
 p. 260, reference 3. For "Quantitative" read "Qualitative."
 p. 270, 7th line from foot of page. For "ratios to calcium" read "ratios of calcium."
 p. 280, 14th line. For "530 m μ " read "520 m μ ."
 facing p. 289, Legend to Fig. 1. For "Paper" read "Thin-layer."
 p. 364, Legend to Fig. 1. For " $V_1 = VA26T$ stabiliser" read " $V_1 = VA26T$ photoelectric cell."
 p. 489, last line of page. For "chrome - alumel" read "chromel - alumel."
 p. 489, 3rd line from foot of page. For "18 \times 9 inches" read "18 \times 9 \times 9 inches."
 p. 490, 2nd line. For "slightly into the furnace" read "into the centre of the furnace."
 p. 490, 3rd line. For "are" read "were."
 p. 490, 6th line under "REAGENTS." For "pH 5.5" read "pH 5.0."
 p. 492, Table V, heading to 5th column. For "open-tube" read "sealed-tube."
 p. 494, 7th line. For "Dr. I. J. M. Muir" read "Dr. I. H. M. Muir."
 p. 521, 3rd table of analytical results. For " $C_3H_5NO_3$ " read " $C_3H_7NO_3$."
 p. 554, 10th line. Delete "1- and."
 p. 689, 3rd line under "REPORT." After "this" insert "form."
 p. 699, 25th line. For "pyrethrum II" read "pyrethrin II."
 p. 708, 1st table of analytical results. For " $C_8H_9NOS_8$ " read " C_8H_9NOS ."